



May 31, 2019

Ms. Tiffany Myers, District Supervisor
Water Resource Division
Michigan Department of Environment, Great Lakes, and Energy
Jackson District Office
301 E. Louis B. Glick Highway
Jackson, Michigan 49201

Re: Changes in Facility Operations
DTE Electric Company – Monroe Power Plant (MONPP)
NPDES Permit No. MI0001848

Dear Ms. Myers:

The DTE Electric Company (Company) is providing this letter as notification of changes in facility operations. This notification is made in accordance with the above-referenced NPDES Permit, Part II.C.11.

Change in Facility Operations

Monroe Power Plant is preparing to route treated effluent from the Flue Gas Desulfurization (FGD) Filtered Service Water (FSW) system to be used as feed water for the plant's Makeup Demineralizer Degasifier Ejectors instead of the current feed of General Service Water (GSW). The current source of feedwater, GSW, will become the alternate source.

In this process GSW is used to supply the Multimedia Filtering (MMF) System for the FGD FSW. The FGD FSW is currently chlorinated prior to the feed to the demineralizers. The demineralizer regeneration waste is being discharged through Monitoring Point (MP) 001D to Outfall 001A, and we have approval to monitor 001A for Total Residual Chlorine due to the chlorination of FSW.

This change proposes the use of chlorinated FGD FSW as cooling water for the vacuum degasifier steam ejector coolers as well. The cooling water will then be directed to the demineralizer regeneration waste monitored at 001D and then mix with an additional 1,978 MGD maximum authorized discharged through monitoring point 001A prior to discharging to Lake Erie via Outfall 001. The plant anticipates that on normal operation, the maximum Total Residual Chlorine that will enter 001D is 2.5 mg/L, and the maximum TRC that will enter 001A is 6 ug/L.

There are several areas within this process that require the use of chemicals. A polymer (Acutreat 4074) and coagulant (Acutreat 4200) are used in the FGD filtered service water system. The additives are currently injected prior to the GSW multi-media filters. A Non-Select water treatment additive request for the use of these additives was approved on May 1, 2017. A Non-Select water treatment additive request for the use of a premixed polymer and coagulant (Acutreat 4274) was approved on April 2, 2018.

The Company will monitor for the correct corresponding NPDES limited parameters for the Select water treatment additive, sodium hypochlorite. For sodium hypochlorite, those parameters are TRC and pH and DECO Monroe Plt has both of those limits included at monitoring point 001A in the current permit. The samples will be collected as specified in the permit.

These changes meet the requirements of Part II.C.11.b, 1) through 4) inclusive, and are shown in red on the enclosed Water Flow Diagram.

If you have any questions relative to this correspondence, or desire any additional information, please contact me at (313) 235-6216 or via e-mail at marcela.orlandea@dteenergy.com.

Sincerely,
DTE Energy Corporate Services

A handwritten signature in blue ink, appearing to read "M. Orlandea".

Marcela P. Orlandea, PE, LEED AP
Senior Environmental Engineer
Environmental Management and Resources

Enclosure

cc: Mr. Ken Mroczkowski – MDEQ, Jackson Michigan District

